Supplementary File 1. A priori-protocol for the social media promotion

Summary:

We will run a 16 week social media promotion, titled the *Child Health Emergency Medicine Campaign*, using Twitter and blogs from September 5th to December 25th, 2016. Each week, we will publish a blog post on the Cochrane Child Health Wordpress site with a summary of a Cochrane systematic review on a pediatric emergency medicine (PEM) topic¹. Our blog posts will also promote the Evidence Repository, Bottom line Recommendations (BLRs) and KT tools (eBooks, YouTube videos) from TRanslating Emergency Medicine for Kids (TREKK). 98 image-based Twitter messages (tweets) per week will share links to the blog post, the Cochrane review, and any applicable TREKK BLRs or KT tools.

Audiences:

The primary audience for our promotion will be PEM health professionals and trainees. A secondary audience, and the focus for promotion of TREKK KT tools, will be health consumers providing child care.

Our Social Media Team:

Team members from ARCHE and TREKK will have the following responsibilities:

Activity/Role	Team members
Create the social media plan	Robin, Kassi, Sandra, Allison
Approve the plan and the resources needed	Lisa, Denise, Michele, Lisa Knisley, Carly Leggett
Create the blog shots	Erin Hill
Compose the tweets	Kassi
Create the blog posts	Allison
Approve content, schedule and post	Robin
messages	
Respond to comments	Erin (TREKK), Sandra (Cochrane Child), Robin (All)
Data collection	Robin
Reports creation	Robin, Kassi, Sandra, Allison

Goals:

Our goals for the promotion are to increase:

- 1. Twitter followers for @Cochrane Child and @TREKKca
- 2. Downloads of TREKK BLRs
- 3. Altmetric.com scores for promoted Cochrane Systematic Reviews
- 4. Site visits to https://cochranechild.wordpress.com/
- 5. Site visits to www.trekk.ca
- 6. Views of TREKK KT tools

¹ We have received copyright permission from Cochrane and Wiley to reproduce the summaries on the blog site.

Objectives:

Target objectives are based on benchmark performance indicators established by the Cochrane Summaries promotion conducted in the fall of 2015.

1. Our promotion will increase followers for the @Cochrane_Child and @TREKKca Twitter accounts by 15%

Accounts	Baseline (Aug 15)	Goal (Dec 25)	
@Cochrane_Child	1,934 followers	2,224 followers	
@TREKKca	633 followers	728 followers	

2. Our promotion will increase total clicks for the following TREKK BLRs² by 10% for the 1st promotional week, and then by 5% for each additional week (e.g., 20% for 3 weeks' promotion)

BLR	TREKK Report	Baseline (Aug 15)	Goal (Dec 25)	Promotional weeks
Fractures	http://trekk.ca/external_resources/1074	386	463	3
Intussusception	http://trekk.ca/external_resources/1159	150	165	1
Multisystem	http://trekk.ca/external_resources/850	157	212	6
Trauma				
Gastroenteritis	http://trekk.ca/external_resources/601	298	343	2
Croup	http://trekk.ca/external_resources/605	438	526	3

3. Our promotion will increase Altmetric.com scores for each Cochrane review by 10 points

Week	PEM Topic	Cochrane Review	Baselin e (Aug 15)	Goal (Dec 25)
1: Sept 5-11	Multiple Trauma	Thromboprophylaxis for trauma patients	6	16
2: Sept 12-18	Fractures	Surgical interventions for diaphyseal fractures of the radius and ulna in children	0	10
3: Sept 19-25	Multiple Trauma	Prophylactic antibiotics for penetrating abdominal trauma	14	24
4: Sept 26-Oct 2	Croup	Nebulized epinephrine for croup in children	33	43
5: Oct 3- 9	Multiple Trauma	Selective computed tomography (CT) versus routine thoracoabdominal CT for high-energy blunt-trauma patients	0	10
6: Oct 10-16	Fractures	Antibiotics for preventing infection in open limb fractures	4	14

² We will also promote the French language BLRs, but we will not collect usage data for these documents.

7: Oct	Intussusce	Vaccines for preventing rotavirus diarrhoea: vaccines in	36	46
17-23	ption	use		
8: Oct	Multiple	Non-operative versus operative treatment for blunt	2	12
24-30	Trauma	pancreatic trauma in children		
9: Oct	Multiple	Antifibrinolytic drugs for acute traumatic injury	49	59
31-Nov	Trauma			
6				
10: Nov	Gastroente	Oral versus intravenous rehydration for treating	14	24
7-13	ritis	dehydration due to gastroenteritis in children		
11: Nov	Chronic	Psychological therapies for the management of chronic		86
14-20	Pain	and recurrent pain in children and adolescents		
12: Nov	Gastroente	Antiemetics for reducing vomiting related to acute	42	52
21-27	ritis	gastroenteritis in children and adolescents		
13: Nov	Multiple	Emergency ultrasound-based algorithms for diagnosing	3	13
28-Dec	Trauma	blunt abdominal trauma		
4				
14: Dec	Croup	Glucocorticoids for croup	16	26
5-11				
15: Dec	Fractures	Interventions for treating femoral shaft fractures in	4	14
12-18		children and adolescents		
16: Dec	Croup	Heliox for croup in children	16	26
19-25				

4. Our promotion will increase 2016 overall site visits to https://cochranechild.wordpress.com/ to 6077³ views

Year:	2013	2014	2015	2016 (to date – Aug 15)	2016 (goal – by Dec 25)
Views:	108	1192	7325	1453	6077
Posts	3	9	26	0	16
Published:					

5. Our promotion will increase overall monthly site visits to www.trekk.ca by 10%

Month:	Baseline (Jul 2016) ⁴	Baseline (Aug 2016)	Average for July/Aug	Goal (Sept 2016)	Goal (Oct 2016)	Goal (Nov 2016)	Goal (Dec 2016)
Sessions:	1,292	1,464	1,378	1,516	1,516	1,516	1,516
Page	3,419	5,865	4,642	5,106	5,106	5,106	5,106
Views:							

 $^{^{3}}$ For the 35 total posts to the Cochrane Wordpress blog, there were 10,109 site visits. We calculated average views per post as 289. The site view goal for 2016 is based on an estimate of 289 views for each new post (16 x 289 = 4624) added to the 2016 baseline views of 1453.

⁴ Revised Sept 26th 2016 based on revised data from TREKK Central Administration

	Users:	856	930	893	982	982	982	982
- 11	030.3.	000	330	055	JUL	JUL	JU_	JU-

6. Our promotion will increase views for previously published TREKK KT tools for croup by 10%, and by an equivalent of 10%⁵ for newly published KT tools for gastroenteritis and chronic pain. We will coordinate our promotion to correspond with the CIHR IHDCYH Talks video competition for 2016: http://www.cihr-irsc.gc.ca/e/49305.html

PEM	KT tool	URL	TREKK Report	Baseline	Goal
Topic				(Aug 15)	(Dec 25)
Croup	eBook	http://croup.trekk.	http://trekk.ca/external	91 total	100 clicks
		ca/book/	resources/1161	clicks	
	YouTube	https://youtu.be/LJ	N/A	3682 views	4050 views
	video	mCs4ykWHE			
Gastro	eBook	TBD	TBD	N/A	100 clicks
	YouTube	https://youtu.be/t3	N/A	N/A	368 views
	video	UkBk62AJE			
Chronic	YouTube	TBD	TBD	N/A	368 views
Pain	video				

Strategy:

Each week, we will reproduce a Cochrane summary as a post on https://cochranechild.wordpress.com/. Each post will also include:

- A blog shot image
- Citations and traceable links to TREKK KT tools & BLRs in English & French (if applicable)
- A citation and a traceable link to the Cochrane review
- A citation with a traceable link to the TREKK Evidence Repository (if applicable)

An initial post (see appendix) will be published during the week of August 29th, describing briefly the Child Health Emergency Medicine Campaign. Promoting tweets will accompany the introductory post.

We will promote the following reviews, BRLs and KT tools according to the schedule below:

Week	Topic	Review	BLR	KT tool	Note
1: Sept	Multiple	Thromboprophylaxis for trauma patients	Multisystem	None	
5-11	Trauma		Trauma		
2: Sept	Fractures	Surgical interventions for diaphyseal	Fractures	None	Lack of
12-18		fractures of the radius and ulna in			evidence
		children			
3: Sept	Multiple	Prophylactic antibiotics for penetrating	Multisystem	None	Lack of
19-25	Trauma	abdominal trauma	Trauma		evidence

⁵ Based on the number of page views for the croup YouTube video and total clicks for the croup ebook.

4: Sept	Croup	Nebulized epinephrine for croup in	Croup	- eBook	
26-Oct		children		- YouTube	
2				video	
5: Oct	Multiple	Selective computed tomography (CT)	Multisystem	None	Lack of
3-9	Trauma	versus routine thoracoabdominal CT for	Trauma		evidence
		high-energy blunt-trauma patients			
6: Oct	Fractures	Antibiotics for preventing infection in	Fractures	None	
10-16		open limb fractures			
7: Oct	Intussusce	Vaccines for preventing rotavirus	Intussuscepti	None	National
17-23	ption	diarrhoea: vaccines in use	on		Infection
					Control
					Week
8: Oct	Multiple	Non-operative versus operative	Multisystem	None	Lack of
24-30	Trauma	treatment for blunt pancreatic trauma in	Trauma		evidence
		children			
9: Oct	Multiple	Antifibrinolytic drugs for acute traumatic	Multisystem	None	Canadian
31-Nov	Trauma	injury	Trauma		Intensive
6					Care Week
10: Nov	Gastroente	Oral versus intravenous rehydration for	Gastroenterit	- eBook	Video
7-13	ritis	treating dehydration due to	is	- YouTube	competition
		gastroenteritis in children		video	
11: Nov	Chronic	Psychological therapies for the	None	- YouTube	- National
14-20	pain	management of chronic and recurrent		video	Child Day
		pain in children and adolescents			(Nov 20)
					- Video
					competition
12: Nov	Gastroente	Antiemetics for reducing vomiting	Gastroenterit	-ebook	Video
21-27	ritis	related to acute gastroenteritis in	is	- YouTube	competition
		children and adolescents		video	
13: Nov	Multiple	Emergency ultrasound-based algorithms	Multisystem	None	Lack of
28-Dec	Trauma	for diagnosing blunt abdominal trauma	Trauma		evidence
4					
14: Dec	Croup	Glucocorticoids for croup	Croup	- eBook	
5-11				- YouTube	
				video	
15: Dec	Fractures	Interventions for treating femoral shaft	Fractures	None	
12-18		fractures in children and adolescents			
16: Dec	Croup	Heliox for croup in children	Croup	- eBook	
19-25				- YouTube	
				video	

Twitter Promotion:

We will promote the blog post, its Cochrane review, the TREKK BLR and any applicable KT tool with tweets and re-tweets from @Cochrane_Child, @TREKKca, @arche4evidence, and @TripChildHealth

Account	Tweets will ink to:	Tweets per day	ReTweets per day	Total Tweets & Retweets per week	Total Tweets & ReTweets for the promotion
@Cochrane	- Blog	3	3	42	672
_Child	- Cochrane Review				
@TREKKca	- Blog	3	3	42	672
	- TREKK products				
	- Cochrane Review ⁶				
@arche4evi	- Blog	0	1	7	112
dence	- TREKK products				
@TRIPChild	- Blog	0	1	7	112
Health	- TREKK products				
	Totals:	6	8	98	1568

Scheduling:

We will use Buffer (https://buffer.com/) to identify peak traffic times and to schedule tweets for all Twitter accounts. We will write tweets in advance and pre-schedule every Monday morning for 16 weeks starting on September 5th. To help keep our project team on schedule, we will use a shared Google Calendar to list all project tasks and deadlines.

Blog shots & Images:

We will include images in all blog posts and Twitter messages. A maximum of 3 key messages from the Cochrane summaries will be integrated into the blog shots. See appendix for sample key messages. Images will be identified and modified from files supplied by Cochrane UK, ShutterStock, the TREKK KT tools project team, and other web sites containing public domain images (Wikimedia Commons, Flikr, Vecteezy, etc.). See appendix for an example blog shot and image-based tweet.

We will create 16 blog shots (1 per week) to be published on the blog and disseminated in at least one Twitter message per day. We will also create image-based tweets using the Pablo image editor through Buffer for tweets promoting Cochrane reviews. We will use TREKK-provided images to promote TREKK BLRs or TREKK KT tools. We will produce blog shots with black text on a light coloured background, using different coloured backgrounds for each topic area:

- Multiple trauma Green
- Fractures Grey
- Croup Purple
- Intussusception Orange
- Gastroenteritis Blue

⁶ We will tweet about the Cochrane Review when there is no BLR or KT tool to promote

As images for some topic areas (i.e., multiple trauma) may be inappropriate for our target audience of health consumers, we will use general emergency medicine images (e.g., ambulances, IV bags, ultrasound machines, x-rays, etc.) instead of images of injured children.

Audience Engagement

Initial Cochrane Author Contact:

We will contact lead authors and the Cochrane Review Groups responsible for the 16 selected reviews during the week of August 29th. We will share our intention to promote their review via social media, and provide the dates of the promotion. We will also invite them to check the @Cochrane_Child twitter account during the week of the review in order to re-tweet our promotional messages, and invite them to provide a quotation for the blog site. Please see a sample email message as an appendix below.

Initial TREKK Content Adviser Contact:

During the week of August 29th, we will also contact the TREKK content advisers who selected the promoted Cochrane reviews for their topic areas in the TREKK Evidence Repository, and who authored the promoted BLRs. We will share our intention to promote their selected Cochrane review and their BLR, and invite them to re-tweet our messages. They will also be invited to provide a quote, about why they selected the Cochrane review and the value of their BLR for health professionals. Please see a sample email as an appendix below.

Communication during the Promotion:

Twitter account moderators will reply promptly to messages about promoted content. Sandra or Robin will reply to comments about Cochrane content; Erin will reply to comments about TREKK content. Sandra, Erin and Robin will notify one another of comments needing moderation from re-tweeted content from the other's account.

Our replies will be positive, and aim to promote further engagement with Cochrane Child Health and TREKK. We will not dispense clinical information in our replies, but commit to sharing comments with our team. Below are anticipated scenarios for audience communication and sample responses:

Scenario	Description	Sample response	
1. Spam	Advertisement as reply	Ignore, or block account (if it happens more	
		than once).	
2. Troll	Intentionally aggravating or	Block account.	
	offensive comments intended to		
	elicit a response		
3. Praise	Comment in support of TREKK or	Thanks and a link to more information	
	Cochrane Child Health	(e.g., TREKK e-update sign up:	
		http://trekk.ca/bulletins/1/subscriptions/new)	

4. Complaint	Comment disagreeing with content	Thanks and a link for "how we select our	
		evidence" (TREKK) or more information about	
		the process of creating SRs (Cochrane)	
5. Suggestion	Comment promoting research	Thanks and a statement that we'll pass their	
	evidence that enhances/contradicts	suggestion along to our team	
	our messaging		

Assessment:

We will use the following indicators and tools to assess each objective:

Objective	Indicator	Tool
1. Increase followers for the	Number of followers	Twitter account
@Cochrane_Child and @TREKKca		information
Twitter accounts by 15%		
2. Increase total clicks for the following	- Click counts	- bit.ly reports
TREKK BLRs by 10% for the 1st	- Document views	- trekk.ca reports
promotional week, and then by 5% for		
each additional week		
3. Increase Altmetric.com scores for	- Altmetric.com scores	- Altmetric.com reports
each Cochrane review by 10 points		
4. Increase 2016 overall site visits to	Number of site visits	Wordpress account
https://cochranechild.wordpress.com/		information
to 6077 views		
5. Increase overall monthly site visits to	Number of site visits	trekk.ca reports
www.trekk.ca by 10%		
6. Increase views for previously	- Click counts	- bit.ly reports
published TREKK KT tools for croup by	- Views	- trekk.ca reports
10%, and by an equivalent of 10% for		
newly published KT tools for		
gastroenteritis and chronic pain		

We will also collect "click count" data using @arche4evidence's bit.ly (https://bitly.com/) account for all blog posts, Cochrane reviews, and TREKK products promoted through Twitter and Wordpress. We will use Excel to record data once a week (30 days after the links are created). Click count data collection will start on October 5th and continue weekly until February 1st, 2017.

Knowledge Dissemination:

We will collect data in early February and prepare an internal report for our stakeholders at TREKK and Cochrane Child Health. Key findings from the report will be disseminated via a poster to be presented at Pediatric Research Day (May 2017) and WCHRI Research Day (Nov 2017). The poster will be adapted into an infographic and shared via Twitter between May and August 2017. A manuscript of the research findings will be submitted to an academic journal in 2018. Potential journals include: BMJ Open, JMIR, Health Communication, and the Journal of Health Communication.

Appendix: Introductory blog post

Sharing Research Knowledge through Social Media: the Fall 2016 Child Health Emergency Medicine Campaign

We are pleased to announce the Fall 2016 Child Health Emergency Medicine social media campaign. Building on a partnership between Cochrane Child Health and TRanslating Emergency Knowledge for Kids (TREKK), the 16-week campaign aims to promote the highest quality of health care for children and families by disseminating Cochrane evidence for pediatric emergency medicine.

Each week, we will share blog posts featuring plain language summaries of selected Cochrane systematic reviews, and associated TREKK evidence products suitable for families, health professionals and researchers. Our focus topics for this campaign include: fractures, intussusception, multisystem trauma, gastroenteritis, and croup.

Cochrane authors have collaborated globally to identify and synthesize evidence to answer pertinent questions about pediatric emergency medicine. Our aim is to expand the reach of these works by using social media as a platform to share their reviews. Be sure to check back each Monday from September 5th to December 19th for a new blog post. Also consider following our tweets from @Cochrane_Child and @TREKKca, and sharing the selected evidence products from www.trekk.ca

Appendix: Sample key messages

Week 1: Thromboprophylaxis for trauma patients

- 1. Unwanted blood clots (thromboembolism) are a frequent complication in people who have experienced physical trauma.
- 2. Evidence of the effectiveness of interventions to prevent thromboembolism (thromboprophylaxis) was reviewed in 16 studies involving 3,005 people.
- 3. Evidence supports the use of thromboprophylaxis to prevent clots in veins in lower extremities (deep vein thrombus) for people with severe trauma.

Appendix: Sample blog shot & image-based tweet





Appendix: Sample E-mail for Cochrane Corresponding Authors

Dear Dr. [insert],

This fall, Cochrane Child Health, in collaboration with Translating Emergency Knowledge for Kids (TREKK), will launch a 16-week social media campaign. The Child Health Emergency Medicine Campaign aims to promote highest quality health care for children and families by disseminating Cochrane evidence for pediatric emergency medicine. Our campaign includes weekly blog posts featuring the plain language summaries of selected Cochrane systematic reviews, and Twitter messages promoting those summaries and associated TREKK evidence products.

We are contacting you because your published Cochrane Review, "[insert title]" has been selected to be featured in our campaign. If you have a Twitter account, please consider promoting messages about your review from @Cochrane_Child during the week of [insert date].

Thank you for your valued contribution to the evidence-base in pediatric emergency medicine. We welcome your input to enhance our campaign, and would be delighted to incorporate a summary statement about your systematic review in our messages. Please respond to this email with your statement before [insert date], and we will include it in the campaign.

Kind Regards,

Appendix: Sample E-mail for TREKK Content Advisers

Dear Dr. [insert],

This fall, Translating Emergency Knowledge for Kids (TREKK), in collaboration with Cochrane Child Health, will launch a 16-week social media campaign. The Child Health Emergency Medicine Campaign aims to promote highest quality health care for children and families by disseminating TREKK and Cochrane evidence for pediatric emergency medicine. Our campaign includes weekly blog posts featuring the plain language summaries of Cochrane systematic reviews selected for topic areas in the TREKK Evidence Repository, and Twitter messages promoting those summaries and associated TREKK evidence products, including our Bottom line Recommendations (BLRs).

We are contacting you because your BLR, "[insert title]" and [this/these] Cochrane review/s from your topic area, "[insert title/s]" have been selected to be featured in our campaign. If you have a Twitter account, please consider promoting messages about the review and/or your BLR from @TREKKca or @Cochrane_Child during the week/s of [insert date/s].

We welcome your input to enhance our campaign, and would be delighted to incorporate a summary statement about the review and why you selected it for your TREKK topic area in the Evidence Repository, or about your BLR and its value for health professional. Please respond to this email with your statement before [insert date], and we will include it in the campaign.

Kind Regards,